FILE NOTATIONS

Entered in NID File ...✓...
Location Map Pinned ...✓...
Card Indexed ...✓...

Checked by Chief P.W.B.
Approval Letter 3-26-74
Disapproval Letter .....

COMPLETION DATA:

Date Well Completed 5-11-74
Location Inspected .....

OW..... WW..... TA.....
GW..... OS..... PA.✓...

Bond released
State or Fee Land .....

LOGS FILED

Driller's Log.....✓.....
Electrical Logs (No.) ...✓...
E..... I..... Dual I Lat..... GR-N..... Micro.....
BHC Sonic Gamma..... Lat..... Mi-L..... Sonic.....
CBLog..... CCLog..... Others.....

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

March 21, 1974

Mr. Gerald R. Daniels
U. S. Geological Survey
8426 Federal Bldg.
Salt Lake City, Utah 84111

Mr. Cleon B. Feight
Division of Oil & Gas Conservation
1588 West North Temple
Salt Lake City, Utah 84116

Re: Anschutz #1 Federal 772
SW SW Sec. 21-19S-21E
Grand County, Utah
Federal Lease U-0149772

Gentlemen:

Transmitted herewith in triplicate is the APPLICATION FOR PERMIT TO DRILL (Form 9-331C) for the captioned well with the following attachments:

Survey plats
12-point environmental letter
7-point casing and safety equipment letter

For topographic reasons we request permission to drill this well at a location not at the center of the 40-acre tract.

Yours very truly,

THE ANSCHUTZ CORPORATION

W. W. Wakefield
Vice President

WWW:kcw
Enclosure

cc Mr. Marvin Jensen
Bureau of Land Management
Moab, Utah

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [x] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [x] GAS WELL [ ] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: The Anschutz Corporation

3. ADDRESS OF OPERATOR: 1110 Denver Club Bldg., Denver, Co. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: NW¼SW¼SW¼ Sec. 21 — 889' NSL, 367' EWL
At proposed prod. zone:

5. LEASE DESIGNATION AND SERIAL NO.: Federal Lease U-0149772

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal 772

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Left Hand Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 21-19S-21E

12. COUNTY OR PARISH: Grand

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approx. 10 miles northeast of Thompson, Utah.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 367'

16. NO. OF ACRES IN LEASE: 600

17. NO. OF ACRES ASSIGNED TO THIS WELL: ----

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ----

19. PROPOSED DEPTH: 5500'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6766KB 6755 GL

22. APPROX. DATE WORK WILL START*: 3-31-74

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36	200'	10sx(circulated to surface)
8 3/4"	7"	20	1250'	75sx
6 1/4"	4 1/2"	10.5	5250	150sx

We propose to drill this well to an approximate total depth of 5500' in the Entrada formation. Electric logs will be run to total depth; no cores are planned. Drilling and completion program is discussed in detail in the 7-point letter attached.
Survey plats are attached.
12-point environmental letter attached.
7-point casing and safety equipment letter attached.
Blanket drilling bond on file.

Approved in accordance with Rule C-3

Very rough topog. PMB

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED W. W. Wakefield — TITLE Vice President — DATE 3-22-74

(This space for Federal or State office use)

PERMIT NO. 43-019-30194 — APPROVAL DATE

APPROVED BY — TITLE — DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

LOCATION PLANS FOR
ANSCHUTZ #1 FED. 772
SW.SW.SEC.21-19S-21E
GRAND COUNTY, UTAH

1. A survey plat for the location of the subject well is attached. Map No.1 shows the route to the well site from Hwy. 50-6 (I-70). This map also shows all the secondary roads now present in the area around the proposed well site.

2. Map No.2 shows the access road in detail (See red dashed line). This proposed road will be built up Middle Bull canyon and will connect with the present road up Bull Canyon.

3. All present wells and dry holes in the area around the proposed well site are shown on Map No.2.

4. See 1 and 2 above.

5. A plan for the location of production equipment at the well site , if the well is successful, is shown on Plat No. 2. Anschutz does have a tank battery at their #1 Fed. 773 well in the NW.SE. of Sec.29-19S-21E., but there is a high cliff between the wells and it would be impractical to use this tank battery for the proposed well.

6. Water is normally available for drilling operations at junction of Bull Canyon and Nash Canyon at the point marked by a red X on Map No.2. The water from Nash Wash will be hauled by truck to the well site.

7. A plat showing the plan for the equipment layout to be used in the drilling of the proposed well is shown on Plat No.3. This plat shows the reserve pit and garbage (burn) pit. Excess drilling mud, waste water, and cuttings will be deposited into the reserve pit during the drilling operations. The garbage and burnable material will be put into the burn pit. At the completion of the well these pits will be folded-in and levelled.

8. See location of house trailers on Plat No.3.

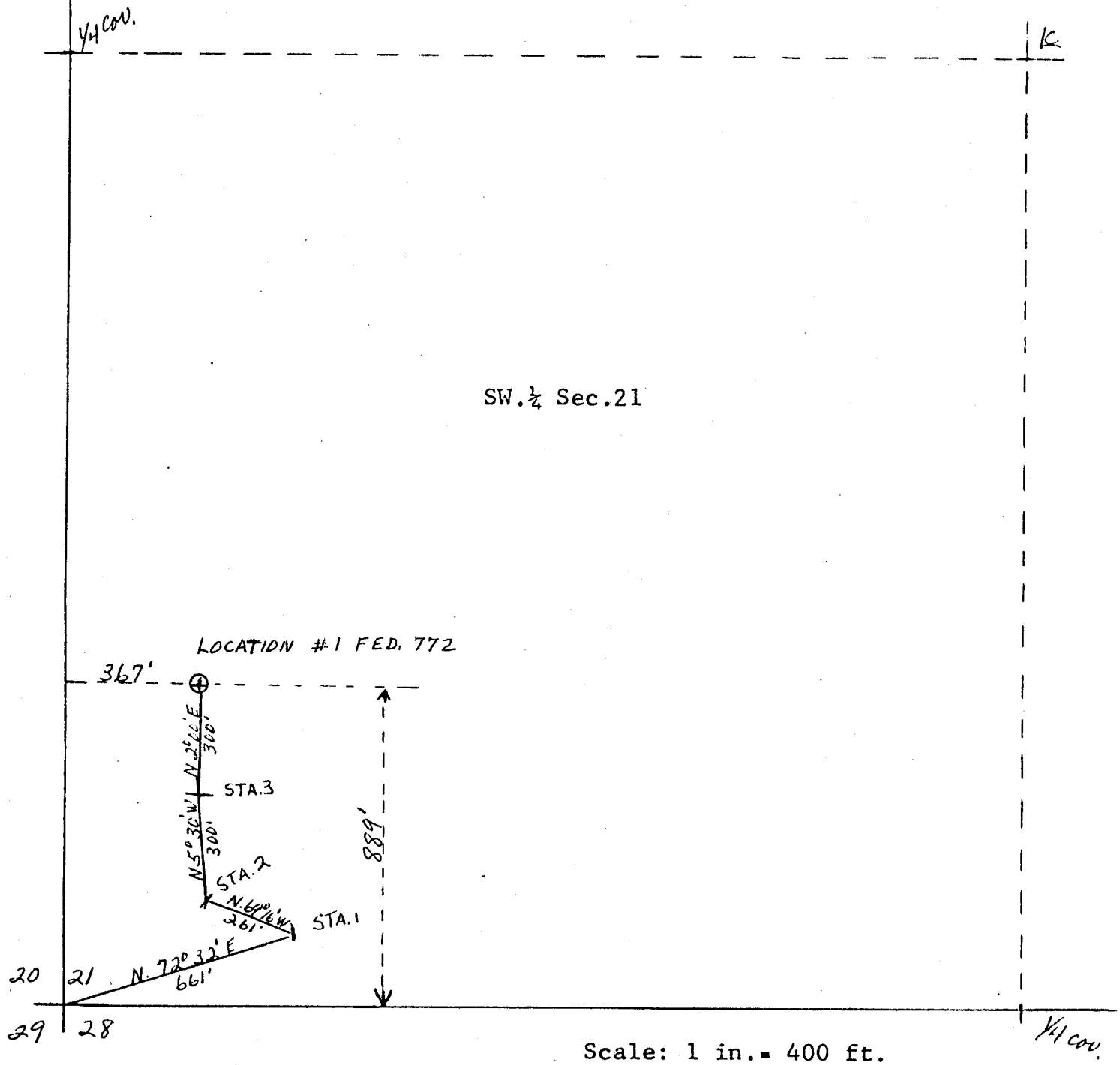
9. There are no air strips in the surrounding area near the well site.

10. See Plat No.3 for the drilling equipment layout.

11. There is no topsoil at the proposed well site. This is in the floor of a steep canyon which is covered with rocks and gravel. Some brush and sage brush are growing among the rocks but it is quite sparse. Some juniper trees are present. After the well is completed and abandoned (if dry), the well site will be cleaned and levelled and the pits will be covered. Seeding will be done if required; but the position in the canyon would probably make seeding useless.

12. As can be readily seen by the topography shown on Map. No. 2, the area is rugged and has steep cliffs, narrow canyons, and numerous dry washes. Access is permitted only by following the narrow canyons. Road construction is often made in the bottom of the washes to minimize the amount of blasting and disturbance of the rock outcrops. The amount of fill is kept to a minimum to eliminate the destruction of the road as much as possible.by flash floods down the canyon. The rocks exposed along the sides of the canyons in the area of the access road and drill site are shales and sandstones belonging to the lower Mesaverde formation. There are a few thin coal seams ((less than 18 inches in thickness) in places; but these are up on the sides of the canyon and will not be disturbed.

LOCATION PLAT
FOR
ANSCHUTZ #1 FED. -772
SW.SW.SEC.21, 19S-21E.
Grand County, Utah
(889'fr.S-line & 367'fr.W-line)
Elev.:6755' grd.

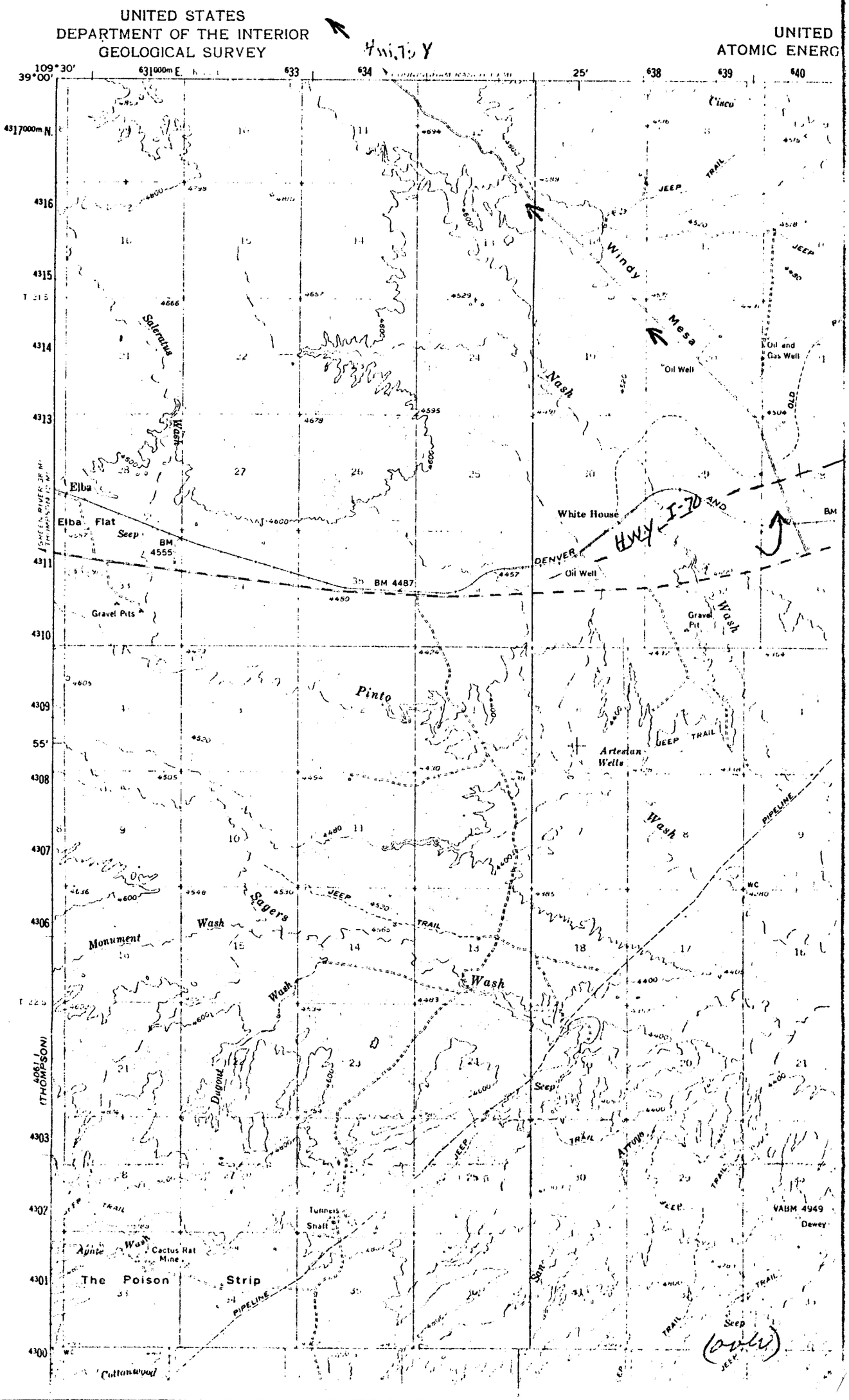


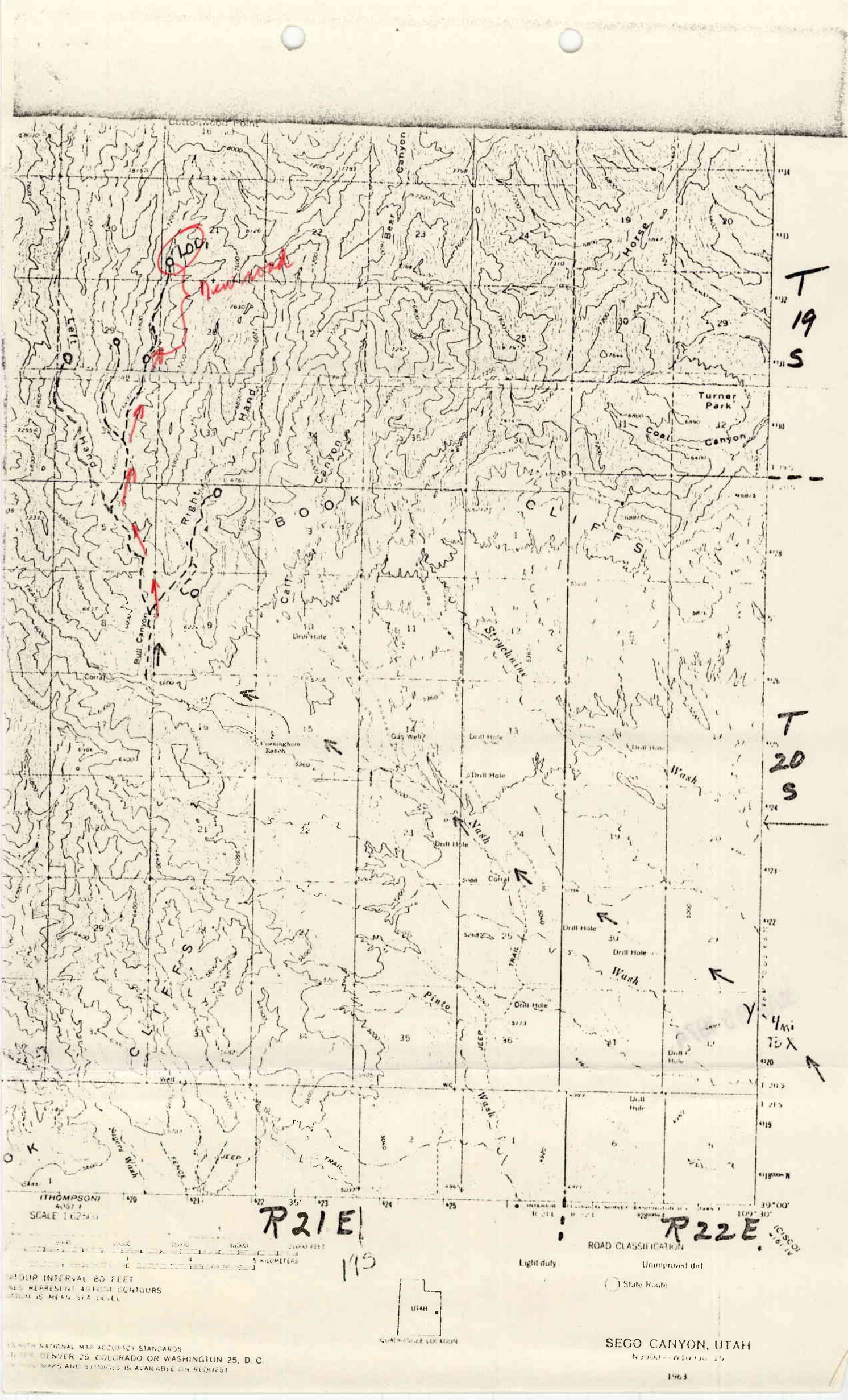
Scale: 1 in.= 400 ft.
Date: Mar.17, 1972
Surveyed by: W. Don Quigley

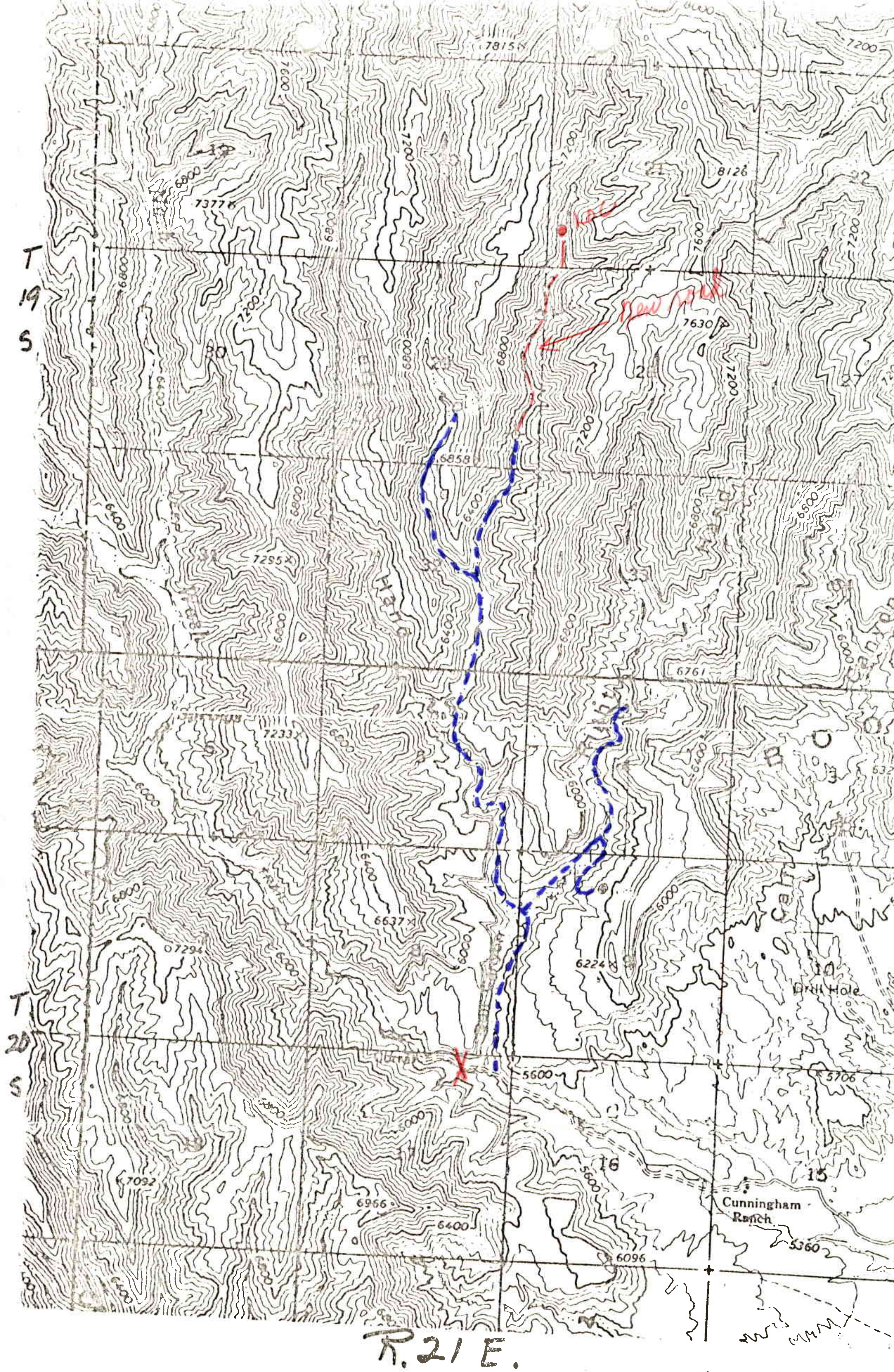
W. Don Quigley

PLAT NO. 1

MAP NO. 1


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
UNITED
ATOMIC ENERG
Windy
Mesa
Nash
Wash
Saleratus
Elba
Elba Flat
Seep
BM 4555
BM 4487
Gravel Pits
White House
HWY I-70 AND
DENVER
Oil Well
Oil and Gas Well
Gravel Pit
Pinto
Artesian Wells
Sagers
Monument
Dugout
Seep
Tunnels
Shaft
Cactus Rat Mine
The Poison Strip
PIPELINE
JEEP TRAIL
Cottonwood
VABM 4949
Dewey
(THOMPSON)


Cottonwood Point
Bear Canyon
Horse
Left Hand Canyon
Right Hand Canyon
Cain Canyon
Turner Park
Coal Canyon
BOOK CLIFFS
Bull Canyon
Strychnine
Cunningham Ranch
Gas Well
Drill Hole
Wash
Pinto
JEEP TRAIL
Sagers Wash
FENCE
Well
WC
Corral
T 19 S
T 20 S
R 21 E
R 22 E
(THOMPSON)
SCALE 1:62500
CONTOUR INTERVAL 80 FEET
DATUM IS MEAN SEA LEVEL
ROAD CLASSIFICATION
Light duty
Unimproved dut
State Route
UTAH
SEGO CANYON, UTAH
1963

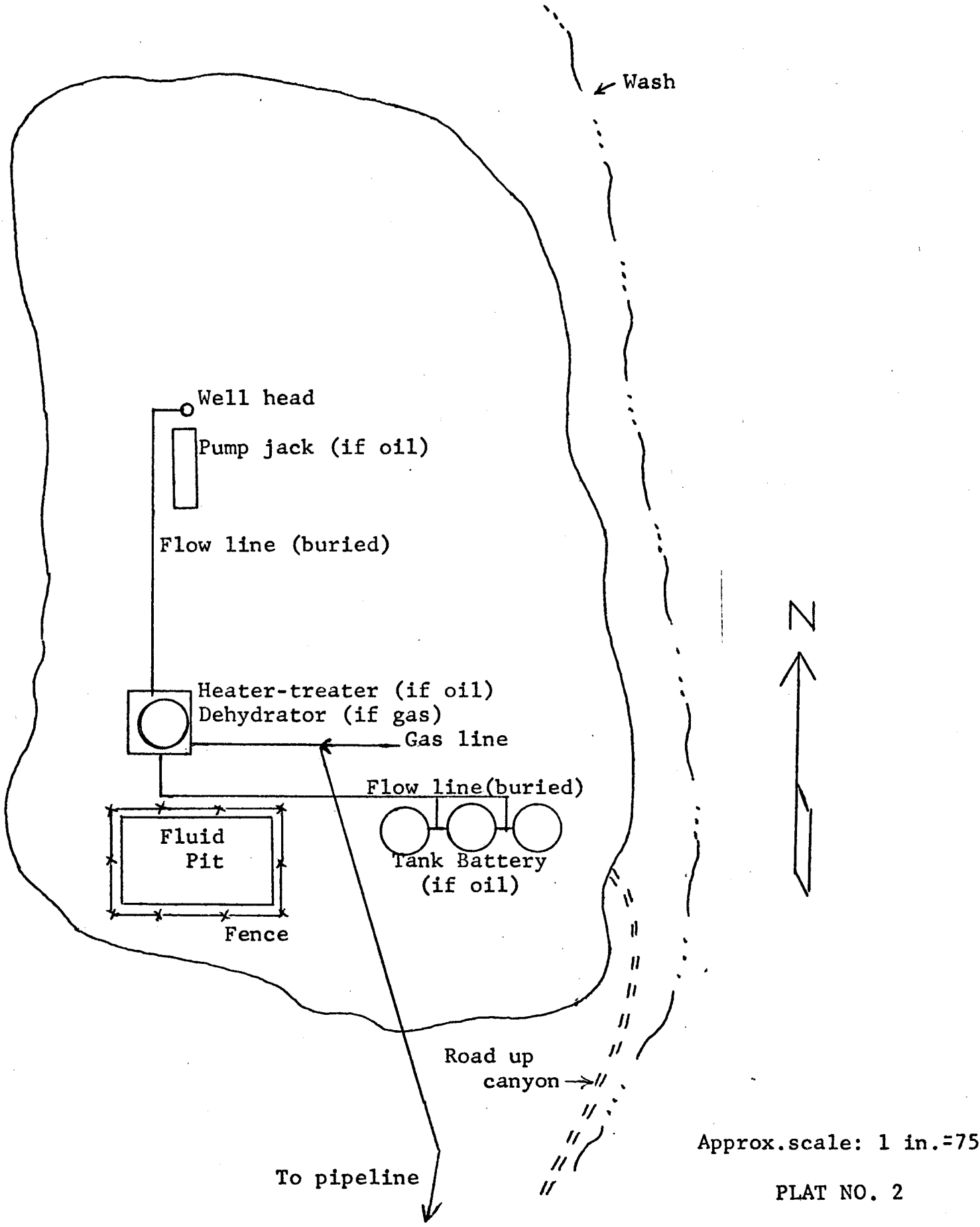


R. 21 E.

R 21 E

MAP NO. 2

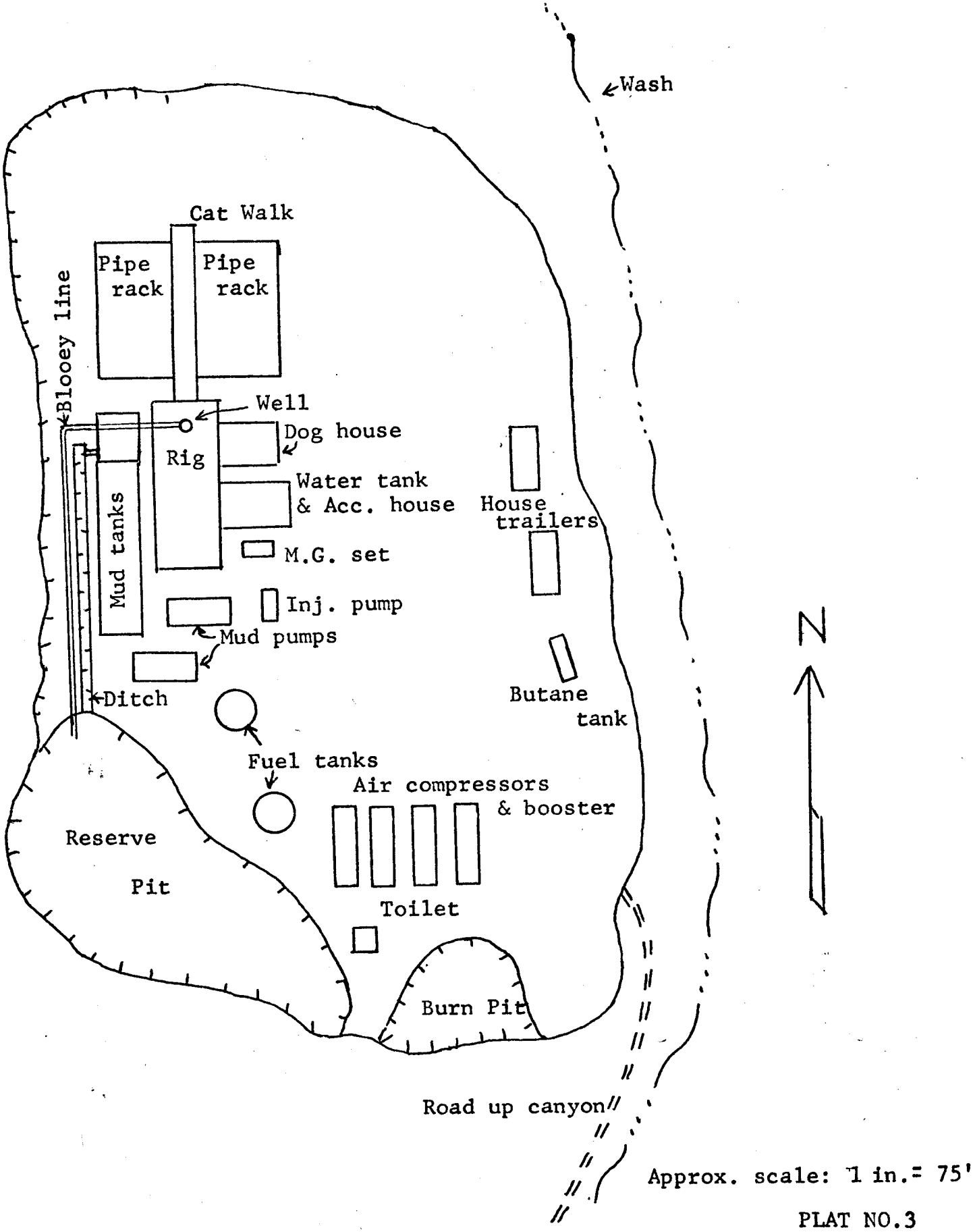
PLAN FOR PRODUCTION EQUIPMENT
ANSCHUTZ #1 FED 72
SW.SW.SEC.21-19S-21E
GRAND COUNTY,UTAH



Approx.scale: 1 in.=75

PLAT NO. 2

DRILLING EQUIPMENT LAYOUT
FOR
ANSCHUTZ #1 FED.77
SW.SW.SEC.21-19S-21E.
GRAND COUNTY, UTAH



Approx. scale: 1 in.= 75'

PLAT NO.3

WELL CONTROL EQUIPMENT FOR
ANSCHUTZ #1 FED. 772
SW.SW.SEC.21-19S-21E
GRAND COUNTY, UTAH

The following control equipment is planned for the above designated well:

1. Surface Casing:
   A. Hole size for surface casing is 12¼".
   B. Setting depth for surface casing is approximately 200'.
   C. Casing specs.are: 9 5/8", J-55, 36.00#, 8 rd. thread, new.
   D. Anticipated pressure at setting depth is approx. 60#.
   E. Casing will be run and cemented with 75 sks of cement with returns to the surface.
   F. Top of casing will be just above ground level.
2. Casing Head:
   Flange size: 10"; A.P.I. pressure rating: 3000#; Series 900; Cameron or equivalent; new or used; equipped w/ two 2" ports with nipples and 2", 3000# W.P. valves. Casing head and 2" valves set above ground.
3. Intermediate Casing:
   A. Hole size below surface casing is 8 3/4".
   B. Setting depth for intermediate casing is approx.1250' (Casing will be set thru the Castlegate sand to shut off the upper water zones.)
   C. Casing specs. are: 7", J-55, 20.00#; 8 rd. thread, used.
   D. Anticipated pressure at setting depth is approx.370#.
   E. Casing will be run and cemented with 75 sks. of cement, and at least 12 hrs. will elapse before drilling recommenced.
   F. Casing will be set in 7" slips in casing head, with a tension of not less than 15,000# set on slips.
   G. Air-mist drilling will be employed down to the point of setting the intermediate casing and then the casing will be blown dry and drilling will continue using air as a circulating medium.
4. Blowout Preventers:
   A. Double rams; hydraulic; one set of blind rams; one set of rams for 3½" or 4" drill pipe; 10"; 3000# W.P.; Series 900; equipped with mechanical wheels and rods for back-up; set on top of casing head flange and securely bolted down and pressure tested for leaks up to 2000#; Cameron, Shaffer, or equivalent.

B. Rotating Head: 10"; set on top of blowout preventer and bolted securely; complete with kelly drive, pressure lubricator, 3½" or 4" stripper rubber for 3000# W.P.; Shaffer or equivalent.

C. The fill and kill lines(2") are to be connected thru the 2" valves on the casing head.

5. Auxillary Equipment:
   A float valve (3000# W.P.) is to be used in the bottom drill collar at all times. A string-float will also be used in the drill pipe and kept within 200'-300' of the surface.

6. Anticipated Pressures:
   The shut-in pressures of the Dakota, Cedar Mountain, Morrison, and Entrada formations at depths of 4100', 4200',4400', and 4800' respectively have been measured at 1000#, 1050#, 1150#, and at 1300# (respectively) in the area.

7. Drilling Fluids:
   Air and/or air-mist with soap and water will be used as drilling media for subject well. In the event of hole trouble, it may be necessary to convert to mud.

8. Production Casing:
   A. Hole size for production casing is 6¼".
   B. Approx. setting depth: Casing will probably be set about 100' into the Entrada formation, the top of which is expected at about 5250'.
   C. Casing specs.: 4½", J-55; 10.50#, 8 rd. thread, new or used.
   D. Casing will be run and cemented with 100 sks of cement - sufficient to bring the cement top at least 100' above the top of the Dakota formation. The cement will be allowed to cure for at least 36 hrs. The 4½" casing will be set on 4½" slips inside a series 900 spool set on the previous casing head flange, and cut off. The tubing head, 10" to 2 3/8", series 900, 3000# W.P., will be installed on top of the spool and bolted down securely. The 2" ports in the side of the tubing head will be equipped with high pressure nipples and 2", 3000# W.P. valves. The production zones will then be perforated thru a master valve and lubricator.
   E. Tubing, 2 3/8" O.D., upset, J-55, 4.70#, new, will then be run, set in the tubing head and flanged down, and the well can then be swabbed-in. If an oil well, the rods and pump can then be run and connected to the pump jack.

March 26, 1974

The Anschutz Corporation
1110 Denver Club Building
Denver, Colorado 80202

Re: Well No. Anschutz Federal 772 - #1
Sec. 21, T. 19 S, R. 21 E, SLBM
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL - Chief Petroleum Engineer
HOME: 277-2890
OFFICE: 328-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation relative to the above will be greatly appreciated.

The API number assigned to this well is 43-019-30194.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sd
cc: U.S. Geological Survey

DRILLING HISTORY
OF
ANSCHUTZ #1 FED. 772 WELL
GRAND COUNTY, UTAH

Location: SW¼ SW¼ Sec. 21, T. 19S., R 21E., S.L.M., Grand County, Utah (889' fr. S-line and 367' fr. W-line)

Operator: The Anschutz Corp., Inc., 1110 Denver Club Bldg. Denver, Colorado 80202.

Contractor: Willard Pease Drilling Co., P.O. Box 548, Grand Junction, Colorado 81501.

Elevations: Ground: 6755'; Kelly Bushing: 6767'

Spudded-in: April 24, 1974

Finished Drilling: May 8, 1974

Total Depth: 5230'

Completed: Dry hole.

Producing Formation: None

Production Intervals: None

Initial Production Rate: None

Surface Casing: 10¾", 40.5#, J-55; Set at 88' K.B.

Intermediate Casing: 7", 20#, J-55; Set at 1183' K.B.

Production Casing: None

Plugged and Abandoned: May 9, 1974

Drilling History

April 20-23: Moving in rig and rigging up.

April 24: Finished rigging up. Drilled rat hole. Drilled surface hole (13 3/4") to 89'. Set 2 jts. of 10 3/4", 40.5#, J-55 casing. Set at 88' (K.B.) and cemented with 100 sks. of cement with returns to surface. Plug down at 7 P.M. Waiting on cement.

April 25: Drilled 89' to 108' (19'). Waiting on cement. Nippled up to drill ahead with 8 3/4" bit and using air for circulation. Drilled mouse hole. Dried-up hole and drilled out cement. Began drilling ahead below casing at 9 P.M.

April 26: Drilled 108' to 533' (425'). Survey at 170' was ½°. Survey at 300' was 3/4°. Survey at 400' was 3/4°. Hole is dusting good. Drilling at avg. rate of 30 ft/hr. in Mesaverde sand and shale and coal. Encountered coal bed, 8' - 15' thick, at 466' to 482'. Good quality coal.

April 27: Drilled 533' to 818' (285'). Made rd-trip at 592' for Bit #3. Bit #2 (HTC-OWV) made 505' (87' - 592') in 30 3/4 hrs. Drilled at avg. rate of 16½ ft/hr. Encountered water in hole at 592' and had to begin mist drilling with air-water-soap. Survey at 485' was ½°. Survey at 760' was 3/4°. Encountered a good coarse-grained, glauconitic, quartz sand with rounded grains at 650' to 670', which was probably the Sego sand. Drlg. at avg. rate of 16 ft/hr. Encountered a very hard quartzitic sand at 716' to 718' which drilled at rate of 30 min/ft.

April 28: Drilled 818' to 1153' (335'). Made rd-trip at 964' for Bit #4. Bit #3 (Smith-T2H) made 372' (592' to 964') in 28¼ hrs. Drilled at avg. rate

of 15 ft/hr. Hit top of Mancos at 780' and Castlegate at about 980'. Castlegate was a f.g. qtz ss. w/rd'd grns. Buck Tongue member had lots of silts and sands. The Mancos section below the Castlegate also had lots of sand beds mixed with the shale. Surveys as follows: 825' - ¾°; 934' - ¾°; 1050' - ¾°; 1089' - ¾°; and 1183' - ¾°.

April 29: Drilled 1153' to 1183' (30'). Drilled to 1183' and decided that we were thru the upper Mancos sands which could contain water, so set the intermediate casing at this point. Bit #4 (HTC-OWV) made 219' (964' to 1183') in 9 hrs. Drilled at avg. rate of 23 ft/hr. Ran 21 jts. of 7", J-55, 20# casing and landed at 1183'. Cemented with 210 sks. of cement. Plug down at 6:15 A.M. Waiting on cement.

April 30: Drilled 1183' - 1430' (247'). Changed out drill pipe and drill collars. Cut off casing and set slips. Nippled up and went in hole with 6 ⅛" bit. Blew water out of casing and drilled out cement. Began drilling ahead at 9:30 A.M. Survey at 1396' was ¾°. Dusting good.

May 1: Drilled 1430' to 1900' (470'). Made rd-trip at 1521' for Bit #6. Bit #5 (HTC-OWC) made 332' (1183' to 1521') in 12½ hrs. Drilled at avg. rate of 27 ft/hr. in Mancos shale. Surveys as follows: 1500' - 1°; 1610' - ¾°; and 1750' - 1°. Dusting good, and drilling ahead at avg. rate of 30 ft/hr.

May 2: Drilled 1900' to 2675' (775'). Drilling ahead at avg. rate of 30 ft/hr in Mancos shale. Surveys as follows: 1900' - 1°; 2069' - 1°; 2185' - 1¾°; 2350' - 2°; 2450' - 2°.

May 3: Drilled 2675' to 3235' (560'). Made rd-trip at 2826' for Bit #7. Bit #6 (Reed - F22J) made

1305' (1521' to 2826') in 47½ hrs. Drilled at avg. rate of 26 ft/hr. Surveys as follows: 2740' - 2¼°; 2965' - 2¼°; 3140'-2½°.

May 4: Drilled 3235' to 3874' (639'). Drilling at avg. rate of 25' - 30' per hr. in Mancos shale. Dusting good and no shows to date. Surveys as follows: 3350' - 2°; 3575' - 2½°; 3770' - 2½°.

May 5: Drilled 3874' to 4430' (556'). Made rd-trip at 4150' for Bit #8. Bit #7 (Reed - F22J) made 1324' (2826' to 4150') in 45 hrs. Drilled at avg. rate of approx. 30 ft/hr. Surveys as follows: 3983' - 2½°; 4110' - 3¼°. Had some good oil stain odor and cut in a silty brown limestone from 4070' to 4230'.

May 6: Drilled 4430' to 4734' (304'). Encountered probable top of Dakota at about 4453 ft. as indicated by a reverse drilling break and by a light gray, bentonitic sandy shale. Drilled a m.g. to c.g. qtz. ss. w/rd'd grns and sl. fluorescence at 4480 to 4510'. Had a small gas flare on next connection below sand (8-ft. flare for 3 sec.). Sand also had water in it and had to begin mist-drilling at 4484'. A sand at 4580' to 4610' was v.f.g. to c.g. w/sl. fluor., and had a little gas and more water. Estimate Morrison top at 4620'. Drilling rate has decreased to about 15 ft/hr. Survey at 4550' was 3°.

May 7: Drilled 4734' to 4960' (226'). Made rd-trip at 4746' for Bit #9. Bit #8 (Reed - F22J) made 596' (4150-4746') in 35 hrs. Drilled at rate of 17 ft/hr. in Morrison sands, siltstone, and shale. Estimate top of Morrison - Salt Wash section at 4810'. Survey at 4810' was 2½°.

May 8: Drilled 4960' to 5230' (270'). Encountered top of Summerville at 5125' and top of Entrada at 5180'. A sand in the basal Morrison from 5110' to

5125' was tight and quartzitic but had residual oil specks and streaks. The Entrada was a fine-grained black sand at the top and was loosely consolidated. A black calcareous petroliferous shale was at the top of the Entrada and another black shale bed occurred about 30 feet below the top. A lot of water was present in the Entrada and the air pressure built up to 900# making further drilling below 5230' unwise. Consequently the drilling was ceased and the hole was circulated for two hours to clean it thoroughly. A short trip was made and found no bridges and only about 5 ft. of fill-up on the bottom. Began logging the hole at 10:30 P.M. Ran I E S, Gamma - Density; and Compensated Neutron Porosity logs. Bit #9 (HTC - J-33) made 484' (4746' to 5230') in 37 hrs. Drilled in lower Morrison, Summerville, and Entrada at an avg. rate of 13 ft/hr.

May 9: Finished logging at 4 A.M. Waiting on orders until 12:30 P.M. to plug and abandon. It is planned to place the plugs as follows:

Plug #1 - 25 sks cement at 5230' to 5080', which is across the top of the Entrada.

Plug #2 - 30 sks cement at 4650' to 4450', which is across the Dakota sands.

Plug #3 - 25 sks cement at 1250' to 1100', which is across the bottom of the intermediate casing.

Plug #4 - 10 sks cement at the surface with well marker.

Laid down drill collars and went in hole open ended with drill pipe to 5230' to place Plug #1. Pumped in 40 sks cement and displaced. Began laying down drill pipe. Laid down 5 jts. and pipe became stuck. Cement apparently flash-set due to hot hole (165°). Called McCullough to run string

shot to back off drill pipe.

May 10: Backed off drill pipe at 4780' (Left 300' of 3½" drill pipe in hole). Laid down pipe to 4650' and placed Plug #2. Laid down drill pipe to 1250' and placed Plug #3. Laid down rest of drill pipe. Began rigging down.

GEOLOGIC REPORT
ON
ANSCHUTZ #1 FED. 772 WELL

General Geologic Conditions

The subject well was located on the flank of a possible northeast trending anticlinal nose passing thru the southeast quarter of Section 21, T 19S., R 21E. Based on geophysical work conducted in the area, the high of the feature should be in the southeast quarter of the section. The well was located in the southwest-southwest quarter of the section. Two faults cross the area: one in a northwest direction between the subject well and the successful #1 Fed. 773 well in Section 29; and one in a northeast direction about one mile east of the well site. The northwest trending fault is downthrown on the well side (northeast side) of the fault and the northeast trending fault is upthrown on the well side (northwest side) of the fault.

The surface structure, evident from exposed beds of the Mesaverde and Mancos formations, is divided into two northward plunging anticlinal axes which extend northward and bifurcate from the Cisco Dome Anticlinal axis farther to the south. One of these axes trends northwestward up thru Section 25 of T 19S., R 20E., and the other trends northward thru Sections 34, 27, and 22 of T 19S., R 21E. The subsurface structure is much older than the surface structure and is not completely conformable to the surface features. Later movements and faulting have distorted the older structure and altered alignments somewhat. Conformability to the surface structure is not essential for favorable prospects of hydrocarbon accumulations in the area. All parts of the older structure may actually be lower structurally at the present than the younger structure as seen from the attitude of the surface rocks; but this is not critical, since the oil and gas were probably accumulated prior to the more recent movement and have been retained in the older structure. Considerable adjustment and variation of structure and movement have undoubtedly been absorbed by the thick sequence of Mancos shale in the area, plus unconformities at the top of the Morrison formation and in the middle Cretaceous section. There is

considerable lensing and overlap in the upper Mancos and Mesaverde sediments which tend to erase underlying structure.

Regionally, the prospect area is located on the northwest plunging flank of the Uncompahgre nose extending northwestward from the Uncompahgre plateau into the Uinta Basin. On the flanks of this nose and southern edge of the Basin a number of natural gas fields have been found and developed during the last twenty years. These natural gas accumulations have been primarily found in the Dakota, Cedar Mountain, Morrison and Entrada formations. The reservoirs in the first three formations have been lenticular sands of varying thickness and areal extent. To date, the fields developed in these formations have been confined to good structural positions; but this may or may not be essential to the gas accumulation. Production may eventually be established in structurally unfavorable positions and the lenticularity of the sands could be found to provide their own traping mechanism. The gas accumulations found in the Entrada formation to date have all been structurally controlled and have a water drive. The Entrada is a fairly consistant, blanket sand in the region and, usually has a high porosity (12 to 20%), thus structural entrapment is necessary to contain the hydrocarbon accumulation. Generally the Entrada, where tested in the area, has contained water (usually saline) or natural gas having a low B.T.U. content (480 to 720 B.T.U.). Thus the natural gas produced from the formation has had to be treated and/or mixed with better quality gas to permit marketing. No oil has been produced hereto from the Entrada formation in the region prior to the completion of the Anschutz #1 Fed. 773 well in Section 29, T 19S., R 21E.

The rocks exposed in the area around the subject well site belong to the lower Mesaverde and upper Mancos formations. The strata in the Mesaverde consist of a series of lenticular sandstone beds with interfingering layers of shale and siltstone. The upper Mancos strata are interbedded gray marine shales, siltstones and sandstones.

Considerable faulting and adjustment has taken place throughout the area due to the various rejuvenations of the Uncompahgre

Uplift. In general, this faulting and movement is not apparent in the Mesaverde strata other than by stratigraphic irregularities. Through experience, it has been found that the faulting has not been essential to hydrocarbon accumulations, but has definitely effected the reservoir rocks adjacent to the fault plane. The natural porosity and permeability of the reservoir rock have been destroyed by the influx of clay minerals and gouge material, thus inhibiting production near the fault plane (nearer than 500 to 600 feet). This is particularly pertinent to the Dakota, Cedar Mountain, and Morrison reservoirs. It may not be so critical to the Entrada reservoirs, due to the greater porosity and permeability inherent with the sands of that formation. It is also possible that the faulting may have aided entrapment of hydrocarbons in the Entrada by the forming of fault traps. This has not been established to date.

Drilling History

A complete daily history of the drilling operations of the Anschutz #1 Fed. 772 well is given above. No major problems were encountered in the drilling of this well; in fact everything progressed smoothly and quite timely. The well was drilled in 15 days using air and air-mist for the circulation media. About 90' of surface casing (10 3/4") was set and cemented, and then an 8 3/4" hole was drilled with air and air-mist, using soap and water, to a depth of 1183', which was below all potential water zones. An intermediate string of 7" casing was then set and cemented. A 6 1/8" hole was drilled below the 7" casing to total depth using air and air-mist for circulation. Water was encountered at 4480' in the upper sand in the Dakota formation, and air-mist had to be used in the drilling of the rest of the hole. Additional water was obtained from two sands in the Salt Wash member of the Morrison formation but the amount was not sufficient to cause any drilling problems.

A great deal of water (warm water +160°) was encountered in the Entrada formation and the air pressure increased to over

900# p.s.i., preventing further drilling with air-mist. Since 50 ft. of the Entrada had been drilled at this point (5180' to 5230'), it was decided to cease further drilling and log the well.

The only problem encountered in this well was in the plugging operations. When the bottom plug was placed at 5230' to 5080', across the top of the Entrada, the drill pipe was not removed fast enough; and the cement flash-set due to the high temperature (165°) of the hole and cemented-in the drill pipe. About 300 feet of the drill pipe was left in the hole.

Stratigraphy

A detailed sample descriptive log, from 200' T.D., is attached hereto. The stratigraphic section encountered in the subject well was quite similar to that found in the #1 Fed. 773 and the #2 Fed. 773 wells. There were minor differences, such as; a thicker Dakota section with better sands, fewer and poorly developed sands in the Morrison formation, and a Summerville section which was only 60' thick compared to the 90' and 48' in the #2 Fed. 773 and #1 Fed. 773 wells, respectively.

The Dakota formation had two sands: one at 4480' to 4510', which had a small amount of gas plus water in it and an indicated porosity of 16% to 19%; and the other at 4580' to 4605', which had some gas at the top and water at the bottom with an indicated porosity of 9% to 14%. The overall thickness of the Dakota was 156 feet compared to the normal 100 ft.

It is believed that like the other two wells in the area, the Cedar Mountain formation was missing in the subject well, indicating a fairly prominent high in the area during Cedar Mountain time.

The Brushy Basin section of the Morrison formation, from 4620' to 4830', did not contain any sands. The Salt Wash section had only two sands, 4830' to 4855' and 4915' to 4928',

both of which contained water and indicated porosities of about 14%. A sandy limestone and very fine-grained limy sandstone at the base of the Morrison contained some black specks of residual oil plus staining and faint fluorescence. This was only the second show of hydrocarbons observed in the whole Morrison section.

The Summerville formation was 60 ft. thick which is intermediate to the other two wells drilled by Anschutz in the area, which suggests that the location may have been on the flank of an Entrada high. The Summerville was red siltstone and red silty limestone.

The Entrada formation was penetrated by 50 ft. The top was a black siliceous shale, about 5 ft. thick, setting on top of a fairly hard fine-grained calcareous sandstone which had about 10% porosity. There was also some black fine-grained sandstone and some more black petroliferous shale. Immediately below the second black shale, the sandstone had some residual black oil specks with slight yellow fluorescence. Finally the coarse-grained, well-rounded, clear to white sandstone, typical of the Entrada, was reached at 5220'. This sand had a porosity of 18% and was water wet. The large volume of water encountered in the bottom of the hole came from this sand.

The formations with their tops, thicknesses, and datum points which were encountered in the subject well are as follows:

Formation	Depth to Top	Thickness	Datum
Mesaverde	Surface	780'	6767'
Mancos (Buck Tongue)	780'	200'	5987'
Castlegate Sand (KMV)	980'	70'	5787'
Mancos (Lower)	1050'	3414'	5717'
Dakota	4464'	156'	2303'
Morrison	4620'	500'	2147'
Salt Wash	4830'		
Summerville	5120'	60'	1647'
Entrada	5180'		1587'
Total Depth	5230'		

Comparison with the datum points of the other two Anschutz wells in the area show that the subject well was about 105' lower structurally than the first well (#1 Fed. 773) on the top of the Entrada and only 50 ft. lower on the top of the Dakota. The Entrada top in the subject well was about 106' lower than the second well (#2 Fed. 773) and the top of the Dakota was about 115' lower. Thus the position of the subject well was not on the structural high. The NE. trending fault between the wells probably has a displacement of about 100 feet; and the general regional dip to the northwest and the flank position of the subject well would account for an additional amount of structural change; all of which tends to neutralize its position on the west flank of a possible high to the east.

Hydrocarbon Shows

The Mancos formation contained a hydrocarbon show at 4070' to 4230' in the subject well. The showing consisted of oil stain, good odor, light blue fluorescence, and good cut in a dark brown, silty limestone. This was in the Frontier - Mowery section of the Mancos. There was no free oil and only a very slight odor of gas in the air returns.

The second showing of hydrocarbons was found in the two sands in the Dakota formation at 4480' to 4510' and at 4580' to 4605'. Both sands had slight fluorescence and gave up a very small amount of gas along with a quantity of water. A ten-foot flare at the end of the blooey line for about 3 to 5 seconds after a connection was the most gas observed.

The Morrison had a very faint show of fluorescence in one of the Salt Wash sands at 4850 to 60'; but contained no observable amount of gas. The sand also contained a quantity of water. Some residual oil specks were also seen in the cuttings from the base of the Morrison formation; indicating that oil was present in this section at one time.

Further slight showings of residual oil were found in the upper part of the Entrada in the subject well. The upper part

of the Entrada also contained beds of black petroliferous shale and black sand which is quite unusual. This could be quite significant and indicate that the well was located in an area of hydrocarbon generation. The hydrocarbons have since migrated and accumulated in some reservoir which is probably nearby. It is believed to be unlikely that the oil found in the Entrada in the first well (#1 Fed. 773) is the only oil in the area. There are probably other and larger accumulations in the area; but in which direction and where are the unknown factors.

Conclusions

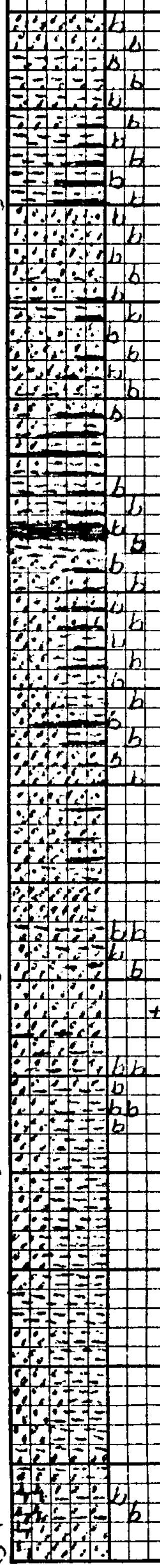
The Anschutz #1 Fed. 772 well was located on the west flank of a northeast trending positive magnetic anomaly which may or may not reflect a possible structural high. It was intended as a possible confirmation well to the #1 Fed. 773 well which found oil production in the Entrada formation. The results of the well failed to confirm or extend the oil production northeastward from the first well. The well was approximately 100 feet lower structurally which could be due to the displacement of the intervening fault and/or that the position of the positive feature may be either east or west of the well site. The magnetic data and surface data suggest that the local high is still farther to the east in the southeast quarter of Section 21. However, the fact that this whole area is on the southeast flank of a major positive magnetic gravity, and seismic high to the northwest must not be overlooked. This could have a special significance; but the details of how or why are still unknown.

The thickening of the Summerville section to the south and east of the first well suggests that the positive feature was located to the northwest in Summerville and lower Morrison time. It is still quite possible that positions to the west and north of the first well would be preferable for potential Entrada production. However, the reverse is true for Morrison and Dakota production.

W. Don Quigley

W. Don Quigley
Consulting Geologist
Cert. No. 1296

A Schutz #1 FED 772
SW SW Sec. 21-19S-21E
Elev. 6767 K.B.



200 Wh. v.fg. bent. ss.
Lt. gry bent ss, dk gry carb. ss. & v.fg. wh. bent. ss.
+ pcs of coal & pyr
Dk & lt gry. bent. sh, & pcs. of coal
Dk gry carb. sh & coal - some bent.
300 Wh v.fg. bent. spec. ss w/ dk grains.
Wh. v.fg. bent. mica. ss. w/ dk grains
350 Some dk gry carb sh. Lt. gry. bent sh (slty) & coal
Wh. v.fg. slty bent ss.
+ dk gry sh
400 Some brn fg. arg. ss - blk carb. sh & coal
Lots of coal & blk carb sh.
Lt gry bent sh, blk carb sh & coal.
5' of good quality solid coal
Lt gry bent sh.
Lt gry bent v.fg. spec. ss. & slty sh w/ some coal
500 Brn v.fg. bent. ss & coal.
Brn calc. slst + coal
Dk brn carb. slst. + coal
Wh. to gry. slst. glauc
Wh to gry fg. speck ss. w carb streaks - Here got wet
600 Wh fg. carb ss. w/ strks, colored ss + blk carb sh. + blk carb sh.
Wh fg. carb. glauc. ss. w/ strks.
Some gry to brn carb sh & blk sh
Gry to wh. v.calcy spec. fg. glauc. & spec. ss.
Gry slty bent. & gry lt fg glauc. v. bent ss.
700 Wh to grn fg to mg. spec ss w/ dk to grn dk grains.
++ 2' Bed of hd v.fg. qtzt. ss. (45 min/ft)
Wh to gry v.fg. qtz ss w/ dk grains + some blk sh.
v.fg. lt gry slty bent ss.
Lt gry. sdy bent. slst.
Km 780 Dk gry to dk. brn slty sh & slst
800 Dk. gry. slty sh & slst
Dk gry marine sh.
Dk gry. sdy to slty sh
900 + some dk gry v.fg. tgt. ss.
6' of fg cln qtz. ss. (Looks wet)
Dk gry sdy sh
Lt gry fg to v.fg. bent ss. (v. calc)
980' Kcg + dk. sdy sh (calc.)
Lt gry cln qtz. fg ss w/ dk grains - sl calc.
1000

Anschutz #1 Fed. 7-2 Boik 1000'-2000'

1000' Lt. gry sl. calc. vfg gry ss. (spec)

Lt. gry carb & calc. vfg. ss. & blk carb to calc. sh.

Lt. gry to dk gry calc. vfg. ss. & slst.

1100'

Dk. gry vfg. dirty calc. ss.

Dk. gry carb. arg. slst.

S.C. 1153' SET 7" casing at 1153'

Dk. gry arg. slst. & gry slty sh.

1200' Gry arg. slst, dk. gry. MARINE sh, bent. & pyr.

1300' Lt. gry bent mar. sh.

Lt. gry bent. slst. & gry sh + pyr.

Lt. gry bent sh.

1400'

1500' Lt. gry bent. sh. & dk gry mar sh.

1600' Lt. gry sl. slty bent sh. & dk gry mar. sh.

Lt. gry calc. bent slst. & dk gry. sh.

1700' Lt. gry calc v.fg. slst. & sh.

Gry. vfg. calc. bent. slty ss. & slst.

1800'

Lt. gry. calc. bent. slty. sh.

1900'

Gry calc. bent. sh.

Lt. gry calc. slst.

Dk. gry v. calc. slty sh.

2000'

K+E 5 X 5 TO ½ INCH 7 X 10 INCHES KEUFFEL & ESSER CO. 46 0863 MADE IN U.S.A.

Ons Inta #1 Fed. 772 Cont 2000-3000'

2000

DK. gray calc silty sh

2100

DK. gray calc marl sh

2200

DK. gray calc marl sh

2300

DK. gray calc bent marl sh

2400

2500

DK gray calc marl sh

some bent. + ' '

2600

DK. gray calc. bent. sh

2700

2800

2900

DK. gray calc. bent. sh.

3000

Am. Lutz # 1 Fed. 772 Cont 3000'-4000'

3000'

DK. gry. calc. mdy. sh.

3100'

3200'

V. calc. dk. gry. mdy. sh., sl. silty & bent.

Gry. calc. silty sh. + bent.

3300'

Lt gry. calc. bent. sl. sl. & f. gry. calc. sh.

3400'

Gry calc. bent. sh.

3500'

3600'

Gry. calc. bent. silty sh.

Dk gry. calc. mdy. sh.

Gry calc. bent. sh.

3700'

Gry silty. bent. calc. sh.

3800'

3900'

+ pyr.

4000'

Aschutz #1 Fed. 77-? Cont. 4000'-5000'

4000 Dk. gry. calc. bent. slty sh.

DK brn arg. slty lms. w/ gas odor.

4100 DK brn arg. slty lms w/ gas odor & w/ good cut - blue fluor. + pyr

Blk calc petro. sh. + brn v. lmy slst w/ oil st. odor & cut + pyr

4200

Gry slty calc sh & slst, bent & pyr

Gry slty anhy. sh. & gry bent. slst & pyr — DAKOTA SLT. ZONE

4300

Gry calc. bent. slty sh.

4400

4460 -Kd

Lt grn slty. sh. & slst.
Wh to lt. gry. bent. sh. & slt
Cln. m.g. qtz ss. w/ rnd'd grns. (loose) (v. cons.) Hole wet (Began mist drill)
Some gas on conn. (10 ft. flare)

4500 C.g. cln qtz ss. w/ rnd'd grns & loose. w/ faint fluor.

Grn, gry & blk. slty. bent. sh.

Rd. grn, gry, & blk calc. slty sh. & ss.

Blk. calc. sh., grn. sh. & f.g. qtz cln ss. w/ rnd'd grns.

4600 Fluor.

C.g. to m.g. cln qtz ss. w/ rnd'd to sub ang. grns (loose) - sl. spotted
Rd, grn, gry & blk. calc. sh., slst., (sh. calc.) + pyr
Hd. wh. to cln. qtzitic. ss.
Lt. grn. & wh. qtzite & varic. silic. sh.

4620 -Jm

Some hd wh to cln. qtzite. & varic. silic. sl. calc. sh.

4700 Rd, gry, grn, pur. silic. sh. & slst.
Rd. slst.
Rd slst & sh.
Blk sh. & slst.
Blk, rd, & gry slst & sh & some hd wh. qtzte. & pyr
Pur, rd, blk, gry & grn slst & sh & some wh. qtzte

4800 -Jmsn

Rd, gry & grn calc. slst
Grn. v.f.g. glauc. ss, slst & sh.
F.g. calc. glauc. grn to wh ss. w/ sub-ang. grns
M.g. to dns sl. calc glauc grn ss. & grn. slst.
Some c.g. to congl. to dns grn calc ss. & wh. anhy (Faint fluor. in ss.)
Gk & gry calc. sh. & slst & bent.
C.g. to dns qtz glauc cln. to grn ss. & grn sh.
Plus some brn lms
Gry, blk & pur. calc sh. & slst.

4900 Rd, grn, pur & grn calc. sh & slst + gry. qtzte. ss.

M.g. to dns calc ss. & varic. calc sh & slst.
Some cln ang. glauc c.g. qtz xls., gry, grn, pur, blk & rd. slst. & sh.
Wh to cln to gry v.f.g. calc. ss.
Gry v.f.g. calc. loose ss. & varic. sh. & slst.
Gry v.f.g. calc. ang. ss. No fluor.
Rd & gry slst & sh. + some wh to cln hd qtzte ss. + brn sty lms

5000

K+E 5 x 5 TO ½ INCH 46 0863
7 x 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

A. Schutz #1 Fed. 772 6 't 5000' – 5230'

5000 Var. c. calc. sd & slst. (pred. rd) + brn vfg. calc ss.

Grn-gry. calc. sdy slst. + some wh. vfg qtzite ss. & ch.

Grn-gry. v. sdy & v. calc. slst & qtzite ss. + gry. sdy lms. qtzite. ss.

Some brn. sdy lms, orange ch.; gry, grn, & rd calc. sdy slst & sh + ch. + wh.

Rd. calc. slst, gry brn sdy ls; vfg calc wht brn ss + orange ch.

5100 Rd, grn & brn calc slst. ss. & lms. yell. & brn

* Lt. brn to tat lmy ss. w/residual blk & brn oil specks. sl. cut.

* Brn. to gry vfg tat silty ss. w. blk residual oil sat. w. fair cut (faint yell & brn fluor)

Js 5130

* A.A. but lots of rd & gry calc. slst.

Rd calc. slst

Rd & grn. calc. slst & brn lms

Je 5180'

Blk. silic. sh (calc)

Vfg. to fg. grn to clr qtz. calc. ss w/rdd to sub-ang. grns - some amber qtz - loosely cons.

some blk vfg loose ss - blk & gry vfg calc loose ss - some

5200 Clr. m.g. qtz (well rdd grns) sl. calc. ss

Blk sdy/calc sh. - some ss w/residual blk oil specks - sl. yell. fluor.

Wh. clr. m.g. to c.g. qtz. ss w/rdd grns - loosely cons - H_2O wet.

T.D. = 5230'

5300

5400

5500

K+E 5 X 5 TO ½ INCH 46 0863
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

Consultg (Don Quigley) 5/9/74
1-772

SW SW sec 21 T19S R21E

USGS:

T.D. - 5230' (Water - Mud)

10¾ @ 88' - Cir. cement / ① neg 10 sx / mike

7" @ 1183' - 310 sx - ② 1250 to 1100 = 95 sx

Dakota 4464
Morrison 4620
Entrada 5180

③ 4650 - 4400 = 50/50'

④ 5230 - 5080 (Wtr.)
(150' plug)

JMB

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

May 9, 1974

Mr. Gerald R. Daniels
U. S. Geological Survey
8425 Federal Bldg.
Salt Lake City, Utah 84111

Mr. Cleon B. Feight
Division Of Oil & Gas Conservation
1588 West North Temple
Salt Lake City, Utah 84116

Re: Anschutz #1 Federal 772
SW SW Sec. 21-19S-21E
Grand County, Utah
Federal Lease U-0149772

Gentlemen:

Transmitted herewith in triplicate is the NOTICE OF INTENT TO ABANDON (Form 9-331) on the captioned well.

Yours very truly,

THE ANSCHUTZ CORPORATION

Robert M. Wakefield
Geologist

RMW:kcw
Enclosure

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER **DRY HOLE**

2. NAME OF OPERATOR
The Anschutz Corporation

3. ADDRESS OF OPERATOR
1110 Denver Club Bldg., Denver, Co. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
NW SW SW Sec. 29 889'NSL 367'EWL

5. LEASE DESIGNATION AND SERIAL NO.
Federal U-0149722

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal 772

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Left Hand Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
21-19S-21E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
6766 KB 6755 GL

12. COUNTY OR PARISH **Grand**

13. STATE **Utah**

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☒	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

This well was drilled to a total depth of 5230' in the Entrada formation. Electric logs were run to total depth; there were no cores or tests. There were no shows of oil or gas encountered, and it is our intent to plug and abandon the well setting plugs as follows(*):

Cement	Depth
5 sx w/marker	Surface
25 sx	1100-1250'
35 sx	4400-4650'
25 sx	5180-5230'

(*) As approved by Mr. Guynn to Mr. Quigley

APPROVED BY DIVISION OF
OIL & GAS CONSERVATION
DATE MAY 13 1974
BY C B Feight

18. I hereby certify that the foregoing is true and correct

SIGNED Robert M. Wakefield TITLE **Geologist** DATE **5-9-74**

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

May 9, 1974

Mr. Gerald R. Daniels
U. S. Geological Survey
8426 Federal Bldg.
Salt Lake City, Utah 84111

Mr. Cleon B. Feight
Division of Oil & Gas Conservation
1588 West North Temple
Salt Lake City, Utah 84116

Re: Anschutz #1 Federal 772
SW SW Sec. 21-19S-21E
Grand County, Utah
Federal Lease U-0149772

Gentlemen:

Transmitted herewith in triplicate is the WELL COMPLETION REPORT AND LOG (Form 9-330) on the captioned well.

Yours very truly,

THE ANSCHUTZ CORPORATION

Robert M. Wakefield
Geologist

RMW:kcw
Enclosure

Form 9-330
(Rev. 5-68)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR
The Anschutz Corporation

3. ADDRESS OF OPERATOR
1110 Denver Club Bldg., Denver, Co. 80202

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface **NW¼SW¼SW¼ Sec. 21** **889' NSL**
At top prod. interval reported below **367' EWL**
At total depth

5. LEASE DESIGNATION AND SERIAL NO.
Federal Lease U-0149772

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal 772

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
21-19S-21E

14. PERMIT NO. | DATE ISSUED **4-5-74**

12. COUNTY OR PARISH **Grand** | 13. STATE **Utah**

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
4-24-74	5-8-74	P&A 5-11-74	6766KB 6755 GL	---

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5230	---	--	→	0-5230	---

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
None

25. WAS DIRECTIONAL SURVEY MADE
no

26. TYPE ELECTRIC AND OTHER LOGS RUN
IES,GR density and CNL logs (transmitted by logging company)

27. WAS WELL CORED
no

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4"	40.5	87	13 3/4"	100 sx circulated	----
7"	19	1193	8 3/4"	210	----

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED **Robert M. Wakefield** TITLE **Geologist** DATE **5-15-74**

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
			There were no cores or tests. Hole drilled w/mud Surf- 1188 Hole drilled w/air and mist 1188-TD

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Mesaverde	Surface	
Dakota silt	4338	
Dakota fm	4428	
Morrison	4617	
Salt Wash	4833	
Summerville	5113	
Entrada	5192	

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GP O 870-401

Form 9-330
(Rev. 5-63)

13

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42 R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: Federal Lease U-0149772

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal 772

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 21-19S-21E

12. COUNTY OR PARISH: Grand

13. STATE: Utah

a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: The Anschutz Corporation

3. ADDRESS OF OPERATOR: 1110 Denver Club Bldg., Denver, Co. 80202

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*

At surface: NW SW SW Sec. 21 — 889' NSL, 367' EWL

At top prod. interval reported below

At total depth

14. PERMIT NO.: — DATE ISSUED: 4-5-74

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
4-24-74	5-8-74	P&A 5-11-74	6766KB 6755 GL	---

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5230	---	--	→	0-5230	---

24. PRODUCING INTERVAL(S), OF THIS COMPLETION— TOP, BOTTOM, NAME (MD AND TVD)*: None

25. WAS DIRECTIONAL SURVEY MADE: no

26. TYPE ELECTRIC AND OTHER LOGS RUN: IES, GR density and CNL logs (transmitted by logging company)

27. WAS WELL CORED: no

23. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
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DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)

TEST WITNESSED BY

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SIGNED Robert M. Wakefield TITLE Geologist DATE 5-15-74

*(See Instructions and Spaces for Additional Data on Reverse Side)

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FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
			There were no cores or tests. Hole drilled w/mud Surf- 1189 Hole drilled w/air and mist 1188-TD

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